

(Following Paper ID and Roll No. to be filled in your Answer Book)

PAPER ID : 4302

Roll No.

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B.Tech.

(SEM. I) ODD SEMESTER THEORY EXAMINATION 2012-13

MANUFACTURING PROCESSES

Time : 2 Hours

Total Marks : 50

— **Note :—** (1) Attempt all questions.

(2) Marks allotted to each question are indicated on right hand side.

SECTION—A

1. This section contains **FIVE** short answer type questions. Attempt **ALL** of the following. (5×2=10)

- (a) What is toughness ? Where such property is desirable ?
- (b) What is case hardening ?
- (c) What is Master Pattern ?
- (d) What is the difference between Punching and Blanking ?
- (e) What is Galvanizing ?

SECTION—B

2. Attempt any **THREE** of the following. All questions carry equal marks. (5×3=15)

- (a) What do you understand by Carbon steels ? List their properties and applications.

- (b) What are the main ingredients of moulding sand ? List the important properties of moulding sand.
- (c) How taper turning is done on lathe machine ? Explain in detail.
- (d) Explain Extrusion process. What do you understand by direct and indirect extrusion ? Give its applications.
- (e) Write a note on Powder Metallurgy giving its applications.

SECTION—C

3. Question (a) is compulsory and carries 7 marks. Attempt **THREE** more questions from the remaining (all carry 6 marks each). (25)

- (a) Draw labelled diagram of three types of Oxyacetylene gas welding flames, also give their applications.
- (b) Explain Rolling Process giving a neat sketch. What are the products made by rolling ?
- (c) Draw a neat diagram of Cupola Furnace and explain its working.
- (d) Write notes on the following :—
 - (i) Brasses and their applications
 - (ii) Allowances on pattern.
- (e) What do you understand by Plant Layout ? Explain in detail.